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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,314	12/20/1999	Yasumasa Yamakoshi	216-429P	2146
2292	7590	10/02/2007		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER ZEMEL, IRINA SOPHIA	
			ART UNIT 1711	PAPER NUMBER
			NOTIFICATION DATE 10/02/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 09/446,314	Applicant(s) YAMAKOSHI ET AL.	
	Examiner Irina S. Zemel	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kusano (of record) in combination with Encyclopedia of Chemical Technology, Centrifugal Separation article, (hereinafter "Encyclopedia").

The disclosure of the Kusano reference is discussed in the previous office action incorporated herein by reference. As discussed in the previous office action, the process using centrifugation is clearly envisaged from the disclosure of the reference. The reference is silent with respect to the specific centrifugation conditions, thus implying that any known and commercially feasible conditions are suitable for the process of Kusano to achieve the desired dewatering of the polymer. The centrifugal separation process for separating solids and liquids is a notoriously known process as evidenced from the Encyclopedia reference. The claimed conditions are no more than commercially known set of conditions, that, in the instant case, results in the desired level of residual liquid. It is further notoriously known in the art, that the centrifugal conditions, such as screen design and, especially, the radial speed (or gravity acceleration achieved) are important parameters that govern the process time required to achieve the desired separation of the components and the residual amounts of liquids in the centrifuged product. The screen size and design is also commonly chosen based on the size of the solid material that is being centrifuged. All this is a common

knowledge of an ordinary artisan. The Encyclopedia article is replete with theoretical and practical evidence of that fact. Thus, the claimed parameters are no more than result effective variables and optimization of the parameters would have been obvious as optimization of result effective variables to achieve the desired level of dehydration in a commercially feasible process. This position is further supported by applicant's own disclosure on pages 40-42, that discloses centrifugation step as conducted in commonly known commercial type centrifugal apparatuses and further disclosing that the choice of the centrifugal conditions are mostly dictated by commercial feasibility of the process. It is further noted that the illustrative examples disclose use of commercially available dehydrators that allow the user to vary the claimed parameters to achieve the desired results. Thus, the claimed conditions, and, thus, the product that inherently results by using those parameters, would have been within routine experimentation of an ordinary artisan absent showing of unexpected results that can be specifically attributed to the claimed processing parameters. It is noted that no such results are presented on the record.

Response to Arguments

Applicant's arguments filed 6-12-2007 and 7-16-2007 have been fully considered but they are not persuasive. The applicants argue that the claimed centrifugal dehydration is conducted under the specifically claimed conditions, while the Kusano reference does not disclose such conditions. The examiner agrees that the Kusano reference, *while clearly teaching centrifugal dehydration step*, is silent with respect to

the specific conditions of centrifugal (centrifugation) dehydration, however as discussed above, the claimed conditions are nothing more than conditions that are common place in commercial-scale centrifugal dehydration and are dictated by commercial efficiency of this step to achieve the desired dehydration level.

The bottom line is that the claimed process only differs from the prior art process in that the centrifugal dehydration step is conducted at specified conditions. This difference is not deemed to be a patentable difference since, as discussed above, the claimed conditions appear to be common set of commercially feasible conditions that can be achieved on commercially available apparatuses.

Also as discussed above, varying the centrifugal conditions, such as acceleration and screen design, is notoriously known in the art and most of the centrifugal separators are designed so that allow to vary this parameters in view of the materials being separated and the desired final results.

Thus, in the absence of unexpected results that can be clearly attributed to the claimed conditions, the invention as claimed is still considered to have been obvious to and ordinary artisan.

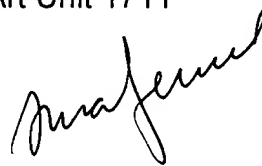
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Irina S. Zemel
Primary Examiner
Art Unit 1711



ISZ